

## **AMENDMENTS TO THE CLAIMS**

**1. (Currently Amended)** A variable gain amplification circuit comprising:  
a signal generator having an output load part comprising a variable resistor or a variable inductor, and an output terminal;  
a variable capacitor connected ~~to~~ between said output terminal and an AC grounded terminal; and  
a control circuit operable to control an output amplitude of said signal generator and a capacitance value of said variable capacitor,  
wherein said control circuit controls the capacitance value of said variable capacitor so ~~that~~ as to make a cutoff frequency or a resonance frequency of said signal generator ~~becomes~~ constant.

**2. (Currently Amended)** A variable gain amplification circuit as defined in Claim 1,  
wherein said signal generator includes ~~[[a]]~~ the variable resistor at ~~[[an]]~~ the output load part thereof.

**3. (Currently Amended)** A variable gain amplification circuit as defined in Claim 1,  
wherein said signal generator includes ~~[[a]]~~ the variable inductor at ~~[[an]]~~ the output load part thereof.

**4. (Previously Presented)** A variable gain amplification circuit as defined in Claim 1,  
wherein said signal generator comprises:

a variable gain mixer having a first input terminal and a second input terminal;  
an RF signal source connected to said first input terminal of said variable gain mixer; and  
an LO signal source connected to said second input terminal of said variable gain mixer.

**5. (Previously Presented)** A variable gain amplification circuit as defined in Claim 1,  
wherein said signal generator comprises:

a variable gain amplifier having a first input terminal; and  
an RF signal source connected to the first input terminal of the variable gain amplifier.

**6-14. (Canceled)**

**15. (Previously Presented)** A variable gain amplification circuit as defined in Claim 5,  
wherein said RF signal source has a signal band equal to or larger than 100MHz.

**16. (New)** A variable gain amplification circuit comprising:

a signal generator having an output load part comprising a variable resistor or a variable  
inductor, and an output terminal;

a variable capacitor connected between said output terminal and an AC grounded  
terminal; and

a control means for controlling an output amplitude of said signal generator and for  
controlling a capacitance value of said variable capacitor so as to make a cutoff frequency or a  
resonance frequency of said signal generator constant.

- 17. (New)** A variable gain amplification circuit as defined in Claim 16,  
wherein said signal generator includes the variable resistor at an output load part thereof.
- 18. (New)** A variable gain amplification circuit as defined in Claim 16,  
wherein said signal generator includes the variable inductor at an output load part thereof.
- 19. (New)** A variable gain amplification circuit as defined in Claim 16, wherein said  
signal generator comprises:  
a variable gain mixer having a first input terminal and a second input terminal;  
an RF signal source connected to said first input terminal of said variable gain mixer; and  
an LO signal source connected to said second input terminal of said variable gain mixer.
- 20. (New)** A variable gain amplification circuit as defined in Claim 16, wherein said  
signal generator comprises:  
a variable gain amplifier having a first input terminal; and  
an RF signal source connected to the first input terminal of the variable gain amplifier.
- 21. (New)** A variable gain amplification circuit as defined in Claim 20, wherein said RF  
signal source has a signal band equal to or larger than 100MHz.